DIRECT TESTIMONY OF GREG MCGLOHORN, P.E. ON BEHALF OF DOMINION ENERGY SOUTH CAROLINA, INC. DOCKET NO. 2021-5-G

1 Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.

A. My name is Greg B. McGlohorn, and my business address is 601 Old Taylor
Road, Cayce, South Carolina. I am the General Manager of Gas Operations for
Dominion Energy South Carolina, Inc. ("DESC" or the "Company").

5

8

9

10

11

12

13

14

15

16

17

18

A.

Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS BACKGROUND.

I received a Bachelor of Science Degree in Biosystems Engineering, with a Minor in Natural Resources Engineering, from Clemson University in 1999. Prior to joining DESC, I worked with B.P. Barber & Associates, Inc., an engineering & consulting firm in Columbia, South Carolina, where I provided professional engineering services to water, sewer, and natural gas utilities in the Carolinas. Prior to that I worked as an engineering associate for the South Carolina Department of Health & Environmental Control in its Bureau of Water. I am a registered Professional Engineer (P.E.) in the State of South Carolina.

I joined DESC, then South Carolina Electric & Gas Company, in 2007 as an Engineer in Gas Operations. Since that time, I have also worked as Manager – Engineering & Construction, Director - Project Engineering & System Planning,

	and Director – Gas Operations. In January 2021, I assumed my current position a
2	General Manager of Gas Operations for DESC.

A.

4 Q. WHAT ARE YOUR DUTIES AS GENERAL MANAGER OF GAS 5 OPERATIONS?

My responsibilities include, among other things, oversight of the daily operations of DESC's natural gas distribution system, including sales, engineering, construction, system planning, operations, and maintenance. I am also responsible for the overall reliability of the system, which includes ensuring that the system is capable of providing safe and reliable service to our customers.

A.

Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY.

The purpose of this testimony is to provide the Commission with an overview of DESC's gas purchasing practices for the period under review, August 1, 2020, through July 31, 2021 ("Review Period"). I will describe DESC's natural gas distribution system from an operations standpoint and discuss the primary facilities that comprise the system, including the capacity of the system for serving DESC's customers. I will also discuss the construction projects in which DESC is engaged that are designed to increase the capacity, reliability, and operational flexibility of the system.

I. PURCHASED GAS ADJUSTMENT PROCEEDING

Q. WHAT IS THE PURPOSE OF THIS PURCHASED GAS ADJUSTMENT ("PGA") PROCEEDING?

By Order No. 87-898, dated August 14, 1987, the Commission instituted an annual PGA review of DESC's gas purchasing policies and practices. These PGA reviews are conducted to determine the prudence of DESC's gas purchasing policies and practices during the period under review and to determine if DESC properly applied its tariffs in recovering its gas costs.

It is worth noting that in every PGA review, the Commission has found that DESC's gas purchasing policies and practices were prudent and that the Company properly adhered to the gas cost recovery provisions of its gas tariffs and applicable Commission directives and orders.

In this PGA proceeding, the Company will provide testimony from personnel who implement DESC's gas purchasing practices and policies and who address tariff issues on a day-to-day basis. Their testimony specifically relates to the Review Period. Rose M. Jackson, Director – Gas Supply Services, explains DESC's gas purchasing practices, gas supply and interstate pipeline capacity. Rachel R. Elliott, Manager – Regulation, discusses the PGA methodology for recovering the cost of gas implemented by the Company pursuant to Commission Order Nos. 2006-679 and 2009-910.

A.

Q. PLEASE PROVIDE AN OVERVIEW OF DESC'S GAS PURCHASING PRACTICES FOR THE REVIEW PERIOD.

DESC's management analyzes and considers the supply and interstate capacity assets of its business on an on-going basis in order to provide safe, reliable, and economical natural gas service in South Carolina. All of the variables related to the growth in our state and the demand on DESC's system must be balanced with corresponding supply and capacity needs. Finally, I want to emphasize to the Commission that the Company procured reliable and reasonably priced natural gas supplies during the Review Period.

A.

A.

II. <u>DESC'S NATURAL GAS DISTRIBUTION SYSTEM</u>

Q. PLEASE DESCRIBE DESC'S NATURAL GAS SYSTEM FROM AN OPERATIONS STANDPOINT.

As of December 31, 2020, DESC's natural gas distribution system consisted of approximately 10,500 miles of pipeline, which included approximately 10,066 miles of distribution mains and 433 miles of transmission mains. DESC's natural gas system also consisted of approximately 436,800 service lines which extend from the Company's distribution and transmission mains. The Company's pipeline facilities range in diameter from ½-inch service lines to 20-inch transmission pipe, and carry natural gas under pressures typically ranging from 25 pounds per square inch gauge ("psig") to 1,100 psig in order to deliver safe and reliable natural gas

1		service to approximately 412,550 factories, businesses, and homes in South
2		Carolina, as of the end of the Review Period.
3		
4	Q.	WHAT LIQUEFIED NATURAL GAS ("LNG") FACILITIES DOES DESC
5		OPERATE?
6	A.	DESC owns and operates two LNG facilities. These facilities are located at
7		Bushy Park near North Charleston and at Salley in western Orangeburg County. The
8		LNG facilities allow DESC to store natural gas in liquid form and revaporize it back
9		into the pipeline when necessary. DESC primarily dispatches its LNG to help meet
10		high demand and to serve as a backup supply of gas in emergency situations.
11		
12	Q.	WHAT ARE THE CAPACITIES OF THE LNG FACILITIES?
13	A.	The Bushy Park facility has the capability of converting natural gas into a
14		liquid, a process known as liquefaction. It can store up to 980 million cubic feet of
15		LNG.
16		The Salley facility has the capability of storing up to 900 million cubic feet
17		of trucked-in LNG. LNG must be transported to Salley via truck because Salley
18		does not possess the ability to liquefy natural gas.
19		
20		
21		

Q. PLEASE DISCUSS THE GROWTH ON THE COMPANY'S SYSTEM DURING THE REVIEW PERIOD.

Data from the 2020 census identified South Carolina as one of the nation's fastest growing states. In addition to general population growth within our state and our service territory, the customer demand for natural gas remains very high, and DESC continued to experience strong growth on its gas system. More specifically, DESC's total number of natural gas customers grew by approximately 3.11% during the Review Period, which is largely attributable to the growth of our residential class of customers because of new home construction occurring across the Company's service territory.

Q.

A.

A.

WHAT STEPS HAS DESC TAKEN TO EXPAND ITS NATURAL GAS SYSTEM DURING THE REVIEW PERIOD?

Over the years, DESC has expanded its system as needed by adding pipeline to reliably serve its new and existing customers and create operating flexibility on its system. Expansion of the system is also designed to accommodate population growth throughout South Carolina.

For example, during the Review Period, DESC installed approximately 3,500 feet of 10-inch steel pipeline along Shop Road and Longwood Road in Columbia, South Carolina, to serve an industrial customer, Mark Anthony Brewing, which is in the Richland County Industrial Park and is contributing 300-400 jobs to the local area.

The Company also installed approximately 9,000 feet of 8-inch plastic
pipeline and 5,000 feet of 6-inch plastic pipeline along White Pond Road in Elgin,
South Carolina, to support residential and commercial growth in the area.

In the Camden, South Carolina, approximately 4,200 feet of 6-inch plastic pipeline was installed along Sycamore Road to ensure improved system reliability and allow for planned future residential development.

In Gaston, South Carolina, the Company installed approximately 4,000 feet of 6-inch plastic pipeline and 2,700 feet of 4-inch plastic pipeline along Boy Scout Road to serve residential developments.

In Aiken County, the Company installed 1,500 of 6-inch plastic pipeline along Edgefield Highway to serve industrial growth in the area.

To meet the growing residential and commercial demand in Horry County, specifically in the Longs community, the Company installed approximately 26,500 feet of 8-inch plastic pipeline along SC-9 and 7,500 feet of 8-inch plastic pipeline along SC-905. The Company also installed approximately 4,500 feet of 6-inch plastic pipeline along U.S. Highway 707 to support residential and commercial growth in the Murrells Inlet and Socastee areas.

DESC installed approximately 2,200 feet of 4-inch plastic pipeline along Alligator Road near Florence, South Carolina, to support the development of residential lots in the area.

DESC installed approximately 19,500 feet of 6-inch plastic pipeline along Mathis Ferry Road in Mount Pleasant to serve the Ferry Wharf commercial

development at Patriots Point. This pipeline will also serve existing commercia
and residential commercial along the route, which extends from Bowman Road to
Patriots Point along Mathis Ferry Road.

To meet growing customer demand in the Bluffton, South Carolina area, DESC installed approximately 18,000 feet of 8-inch plastic pipeline from SC-462 to Snake Road along SC-170, which will serve commercial and residential customers in the Okatie area of Beaufort County.

O.

Α.

DID THE COMPANY UNDERTAKE ANY PROJECTS DURING THE REVIEW PERIOD TO IMPROVE THE SAFETY, INTEGRITY, AND RELIABILITY OF ITS NATURAL GAS SYSTEM?

Yes. In addition to system expansion, DESC completed a number of activities and projects to improve system safety, integrity and reliability.

During the Review Period, DESC completed External Corrosion Direct Assessments (ECDA) on over 118 miles of transmission line, which is well over 20% of DESC's total transmission line mileage.

During the Review Period, DESC completed all necessary retrofit work to make its 6" and 8" transmission lines that feed the distribution system in the Sumter area "piggable" to allow the passage of internal inline inspection ("ILI") tools. DESC also completed most of the cleaning runs and caliper runs, which must be completed prior to running the magnetic flux resonance ("MFL") tool, commonly referred to as a smart pig. The MFL runs—originally scheduled to be completed

during the Review Period but delayed by the pandemic—were completed in early September, shortly after the Review Period ended. With the completion of the ILI for the 6" and 8" transmission lines in the Sumter area, DESC has now conducted ILI on 11 pipelines totaling approximately 113 miles since implementing ILI for its transmission lines. This represents roughly 74% of our pipelines which are currently capable of being inspected by the technology.

The Company also continued its Sewer Cross-Bore Inspection Program to identify and remediate any legacy interferences or intersections existing between our gas lines and the sewer system, also known as "sewer cross-bores." During the Review Period, the Company performed inspections of over nine miles of sewer main and 850 associated sewer laterals. As part of this project, three sewer cross-bores were discovered and remediated during this Review Period.

As for the Company's distribution system, over the last several years DESC has replaced vintage polyethylene 3306 "black plastic" service lines, which are subject to brittle cracking failure, in accordance with recommendations by the Pipeline and Hazardous Materials Safety Administration ("PHMSA"). During the Review Period, the Company replaced 555 of these service lines. This is a lower annual total that what we have achieved in recent years; progress was slowed due to the Covid-19 pandemic, as well as the fact that the final remaining black plastic service lines are the most difficult to replace. To date, the Company has replaced 26,391 "black plastic" service lines in the system. At present, the Company estimates that it has 281 black plastic service lines remaining to be replaced, and

plans are to complete the replacement of all known remaining ones by the end of December 2021.

A.

4 Q. PLEASE BRIEFLY DESCRIBE THE SAFETY PERFORMANCE OF DESC 5 CONCERNING ITS NATURAL GAS SYSTEM.

As a regulated natural gas utility, DESC is subject to comprehensive federal and state regulation. At the federal level, PHMSA, acting through the Office of Pipeline Safety, has developed pipeline safety regulations over the years. These pipeline safety regulations include, among other things, provisions governing pipeline design, construction, testing, operations, maintenance, and emergency response activities. There are also specific requirements for training and qualifying personnel to work on natural gas systems, as well as additional requirements for administering integrity management programs for both gas transmission and distribution pipelines. The South Carolina Office of Regulatory Staff monitors the Company's compliance with pipeline safety regulations.

DESC has an outstanding safety record due in large part to the Company's safety-focused culture. DESC's highest priority is to safeguard and protect those individuals who come into contact with the DESC system, including employees, customers, and the public at-large. Moreover, the Company employees who work on DESC's pipeline system and at the LNG facilities take great pride in safety performance.

1 Q. WHAT ARE YOU REQUESTING OF THE COMMISSION IN THIS 2 PROCEEDING?

The primary commitments of DESC continue to be to operate our system in a safe, reliable and efficient manner. Further, our employees are committed to providing outstanding customer service and operational excellence. During the Review Period, the Company prudently managed its business operations, which included the purchase and recovery of its gas supplies and administration of the PGA. Therefore, on behalf of DESC, I respectfully request the Commission find that the Company has recovered its gas costs for the Review Period consistent with its tariffs and Commission orders and that it has purchased its gas supplies and administered the PGA in a prudent and reasonable manner.

A.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

14 A. Yes.